

SELECTION OF AUTOMATION SYSTEMS:
Criteria for School Libraries
in Manitoba

Manitoba
Education
and Training
Instructional
Resources



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SELECTION OF AUTOMATION SYSTEMS:
CRITERIA FOR SCHOOL LIBRARIES IN MANITOBA

Manitoba Education and Training
Instructional Resources Branch

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INTRODUCTION

Selection of Automation Systems: Criteria for School Libraries in Manitoba has been prepared as an evaluation instrument to help educators at the school, school division/district, and provincial levels evaluate, identify and/or select an ideally comprehensive school library automation system. Use of Selection of Automation Systems: Criteria for School Libraries in Manitoba should be based upon a background of intensive academic and practical research into school library automation, an understanding of the concepts as well as the problems of school library automation, and an awareness of local needs in both the present and the future.

The document has the flexibility to perform several important functions for purchasers, vendors, and Manitoba Education and Training:

- To evaluate school library automation systems relative to the unique requirements, both present and projected, of the school library or libraries and of the school division/district to be automated.

PURCHASERS:

Before evaluating school library automation systems for purchase at the school and/or school division/district levels, the purchaser must determine which functions are required to meet specific local needs. For example, a catalogue module, an on-line public access catalogue (OPAC), MARC record format, French and English language inquiry, and networking capability for information-and resource-sharing may all be required. Any system which does not meet these identified requirements would be eliminated from the evaluation process at this point. The remaining systems may be evaluated and compared by applying the criteria contained in this checklist.

Because the checklist provides guidelines for choosing an ideally comprehensive automation system, the criteria should be examined in light of the unique requirements or local priorities of the particular school or school division/district to be automated. Local conditions may change some of the criteria from essential to desirable and vice versa.

- To provide the basis for a Request for Proposal (RFP) to be completed by the vendor(s) during the selection process.

VENDORS:

The checklist may be forwarded to vendors of school library automation systems as part of a school division/district Request For Proposal (RFP) during the selection process. The vendor may indicate the elements included in the particular system being marketed as well as improvements or enhancements in the process of development. The completed vendor checklist may form part of the contract with the successful vendor.

- To provide a standard provincial evaluation of school library automation systems for comparison and reference.

MANITOBA EDUCATION AND TRAINING:

Each automation system to be evaluated will be examined in accordance with the criteria as set out in the checklist. A summary of the strengths and weaknesses of the system will form part of each evaluation. Eventually such evaluations will be available for reference to schools and to school divisions/districts upon request from the Office of the School Library Curriculum Consultant.

PRACTICAL CONSIDERATIONS

1. CAVEAT EMPTOR - BUYER BEWARE

Deal with reputable firms.

2. Contact other customers for their independent evaluations before entering into a contract with a vendor.
3. Be aware that database transferability is an important consideration in anticipation of possible changes in software or hardware.
4. Note that user acceptance is often dependent upon the aesthetics of screen displays. Simplicity and clarity are important to users.
5. Have all costs itemized by the vendor (e.g. How are after sales services such as program updates, installation, on-site training, and hot line supports paid for and maintained?).
6. Inquire as to the future pricing schedule for those modules not initially acquired.

INSTRUCTIONS FOR USE OF THE CHECKLIST

- List the school library automation system(s) to be evaluated in the spaces provided at the top of the columns to the right of the checklist.
- Indicate that the system under examination completely satisfies the criteria in the checklist by placing an "X" in the appropriate column beside each item or that it does not by leaving the space blank.
- If local conditions change some of the criteria from essential to desirable or vice versa, adjust the checklist accordingly for each item affected or remove the inapplicable item(s).
- Note strengths or weaknesses of the automation system under scrutiny in the space provided at the end of each sub-section and section of the checklist.
- Use the completed checklist to compare and contrast the features of up to 4 different school library automation systems. Always refer to written comments in arriving at a selection.
- Prepare a rationale to justify the selection of the system.

NOTE: Throughout the document, the terms **user** and **operator** are used as follows:

- 1) **user** refers to a library patron who may be a student, teacher, etc.;
- 2) **operator** refers to school library staff, and/or the school library automation system manager.

PHASES IN SCHOOL LIBRARY AUTOMATION

The order of the steps outlined below will vary with each School or Division/District situation.

1. RESEARCH PHASE

- Research existing literature
- Seek expert information and advice
- Conduct needs assessment
- Compare and contrast the existing services
- Develop a plan that utilizes the new technology
- Terminate or proceed to Phase 2

2. PROMOTION AND INFORMATION PHASE

- Plan preliminary presentations
- Present plan to administration of school or division/district
- Assess support and revise, terminate or proceed
- Present plan to teachers
- Assess support and revise, terminate or proceed
- Present plan to Board
- Assess support and revise, terminate or proceed to Phase 3

3. IMPLEMENTATION PHASE

- Prepare detailed time line
- Prepare detailed cost analysis including required staffing
- Seek necessary approval(s)
- Revise and resubmit for approval, terminate, or proceed to Phase 4

4. OPERATIONAL PHASE

- Prepare and release request for proposals
- Assess responses using Selection of Automation Systems:
Criteria for School Libraries in Manitoba
- Spend hands-on time with installed systems under consideration
- Prepare "Justification for Selection of Automation System"
- Obtain system
- Begin training programs and proceed

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1. REQUIREMENTS FOR OPERATION OF ALL MODULES

1.1 VENDOR

Essential

A. provide after sales service:

- (i) tutorials in basic use, maintenance, and management of the system;
- (ii) a full set of documentation in clear simple language in English and/or French as required;
- (iii) ongoing maintenance and customer service;
- (iv) software enhancements as developed;
- (v) hot line support

B. permit or provide backup of master diskettes

Desirable

C. provide after sales service:

- (i) on site instruction in basic use, maintenance, and management of the system

Comments: _____

1.2 PROGRAM

Essential

- A. provide manual and automatic backup routines for all files
- B. provide procedures and programs to recover from hardware or software failure
- C. be menu-driven in all functions
- D. accommodate current and future files in terms of number of titles for a minimum collection of 10,000 bibliographic records for individual schools and of 100,000 bibliographic records for school division/district libraries or media centres
- E. allow for French language as required
- F. provide frequent and meaningful prompts
- G. provide comprehensive "help" screens for all steps
- H. provide for independent, and integrated operation of modules depending upon needs of library
- I. provide for maintenance of authority files (global changes; cross referencing of subject headings; descriptive and/or historical information regarding name, series, and subject heading changes)
- J. provide variable length fields with exception of control fields within MARC records

Desirable

- K. allow operator to define and adapt menus, helps and other messages as necessary
- L. provide for concurrent operation of modules depending upon the needs of library
- M. provide local area net working (LAN) capability

Comments: _____

1.3 SECURITY

Essential

- A. provide a turnkey system which includes predefined operator codes, helps and other messages
- B. prevent unauthorized use of all files
- C. prevent dumping of programs and damage to database
- D. allow operator to define and adapt user codes
- E. disallow exit from OPAC menu by user

Comments: _____

1.4 STATISTICS

Desirable

- A. provide a report generator/writer in addition to reports available within each module

Comments: _____

Section 1: REQUIREMENTS FOR OPERATION OF ALL MODULES

Summary of
Comments _____

2. MODULES

2.1 ACQUISITIONS

1. GENERAL

Essential

- A. interface with other modules, especially cataloguing and circulation
- B. function independently from other modules
- C. function concurrently with other modules
- D. accept, store, and transfer partial bibliographic records in MARC format with the minimum required fields of author, title, publisher(s), date, binding, price, number of copies, ISBN, notes
- E. accept, store, and transfer acquisitions records such as requestor, purchase order number, invoice number, vendor, fund, school, order date
- F. allow operator to define format for acquisitions records, purchase orders, claims notices, cancellation notices, fund/school files, vendor files
- G. provide access to files through a variety of points e.g. author, title, keyword, purchase order number, invoice number, vendor, requestor, fund, school, order date, etc.
- H. provide statistics to monitor acquisitions activities e.g. for items ordered, received, claimed, cancelled, expenditures per fund/school, vendor performance

...2.1 ACQUISITIONS

Desirable

- I. accept, store, and transfer full bibliographic records in MARC format as defined in glossary
- J. allow acquisition status to display on OPAC
- K. allow reserves/holds on items on order or in process
- L. allow interface with mail merge to produce personalized letters and notices

Comments: _____

...2.1 ACQUISITIONS

2. ORDERING

Essential

- A. allow for automatic verification against existing on order file
- B. allow for automatic verification against existing catalogue
- C. allow for duplicate orders for items in catalogue, in process or on order using record already in database
- D. allow for multiple copies to be ordered from multiple locations and charged to multiple accounts
- E. automatically check fund/school accounts and alert operator if insufficient funds remain
- F. automatically change status of orders and provide dates as each stage in the order process is completed
- G. allow online review of titles for consideration before preparing purchase orders
- H. allow for individual or batch production of purchase orders

Desirable

- I. allow over-commitment

Comments: _____

...2.1 ACQUISITIONS

3. RECEIVING

Essential

- A. allow for receipt of full or partial shipments
- B. automatically change status from "on order" to "received" and add date received
- C. automatically encumber or update all fund/school accounts

Desirable

- D. automatically update vendor performance statistics
- E. prepare and print payment vouchers for accounting
- F. track order closing dates for accounts and list materials not received

Comments: _____

...2.1 ACQUISITIONS

4. FINANCIAL RECORDS

Essential

- A. allow operator to create records to include fund/school identification number or code, fund/school name, amount budgeted, commitments, amount spent to date, and balance
- B. automatically update all files for any items ordered, received, cancelled
- C. allow manual modifications to records with automatic adjustments to balances
- D. prepare and print fund accounting reports
- E. track budgets by indicating total funds available, amounts committed, and amounts spent

Comments: _____

...2.1 ACQUISITIONS

5. VENDOR FILE

Essential

- A. allow operator to create records which include vendor name, address, telephone number, local representative's name, address, telephone number, account number, timing of claims, cancellation period
- B. allow operator to modify and delete vendor records online

Comments: _____

...2.1 ACQUISITIONS

6. CLAIMS AND CANCELLATIONS

Essential

- A. search for, locate and retrieve all items which are still on order after a set time period
- B. allow user to set timing of claims
- C. allow manual override of claim dates
- D. prepare and print claims list or letters to vendors
- E. automatically change status from "on order" to "claimed"
- F. allow operator to set timing of cancellations
- G. prepare and print cancellation lists or letters to vendors
- H. automatically change status from "on order" to "cancelled"
- I. automatically remove commitments from fund/school accounts and adjust balances
- J. allow reuse of record for another vendor

Desirable

- K. prepare and print cancellation notices for requestors

Comments: _____

Summary of Comments

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

2.2 CATALOGUE

1. GENERAL

Essential

- A. interface with other modules, especially circulation and acquisitions
- B. function independently from other modules
- C. function concurrently with other modules
- D. use MARC record format (See appendix for recommended fields)
- E. accept and store full and edited MARC bibliographic records
- F. construct indexes automatically as records are entered/loaded
- G. automatically create item records for circulation
- H. print spine labels and labels for borrower's cards and pockets
- I. create and print bibliographies in any required sequences and/or formats
- J. allow export of MARC records
- K. allow transfer of files to diskette
- L. allow transfer of files via electronic mail

Desirable

- M. print catalogue cards
- N. print barcode labels
- O. create and print catalogues in any required sequence and/or format

...2.2 CATALOGUE

P. provide statistics to monitor cataloguing activities and researchs e.g. items added, modified, deleted, types of searches, results

Comments: _____

...2.2 CATALOGUE

2. DATABASE CREATION AND MAINTENANCE

Essential

- A. allow operator to define record format, e.g. indicate which fields from the MARC record are needed plus provide the flexibility to add fields for local needs [See Appendix 1 for a typical abridged MARC record format for school libraries.]
- B. allow operator to input diacritical marks
- C. allow transfer and subsequent editing of acquisitions records
- D. allow manual keying of records into database
- E. allow batch loading of imported derived records from other sources e.g. Bibliofile, Telebook, UTLAS, TKM, Laserquest, SDM, Brodart
- F. alert operator of system errors
- G. merge records with those from another source as required
- H. allow online modification of data in all fields of catalogue record
- I. allow online deletion of records
- J. alert operator when a record is about to be deleted
- K. automatically correct or delete index entries as records are modified
- L. display and/or print records to verify data entry
- M. print a title edit report in a user-defined print format

...2.2 CATALOGUE

N. allow, with operator alert, duplication
of standard international control numbers
e.g. Library of Congress, CanMARC, ISBN

O. disallow duplication of locally assigned
unique identification numbers e.g. title
number, accession number

Desirable

P. alert operator if an error is made (e.g.
edit checking, ISBN verification, LC
number verification.)

Comments: _____

...2.2 CATALOGUE

3. AUTHORITY CONTROL

Essential

- A. include authority control to establish consistent forms for headings for persons, subjects, etc.
- B. set no limit on the number of authorities which can be linked to a title
- C. allow online manual maintenance of all fields of individual authority records
- D. permit global changes to all authorities
- E. automatically relink modified authorities to appropriate titles
- F. include "see" and "see also" references
- G. disallow blind references
- H. print authorities by category
- I. allow downloading of authorities from another source
- J. integrate with Search/Inquiry module

Comments: _____

2.3 SEARCH/INQUIRY/OPAC

1. GENERAL

Essential

- A. allow specific author, title, subject, and series searches
- B. allow keyword searches in all fields
- C. allow operator to establish various levels of access
- D. allow truncation on search items
- E. allow searches for any word "position", i.e. the words or character strings being sought do not have to be the first in the heading, title, etc. nor do they have to follow one another in order
- F. allow searches using Boolean logic
- G. ignore or forgive variations in accents
- H. ignore or forgive variations in upper and lower case
- I. provide established search/inquiry guidelines for handling punctuation
- J. allow termination or suspension of search throughout the search process
- K. include operator-defined stopwords
- L. provide automatic link to authority file for "see" and "see also" references regarding name, series, and subject heading changes
- M. print a shelf list

...2.3 SEARCH/INQUIRY/OPAC

Desirable

- N. permit "browsing" by displaying terms which are alphabetically near to search term
- O. permit "browsing" by displaying items contiguous in the shelf list
- P. provide a "sound alike" feature for searching names with variant spellings e.g. Burton and Berton, etc.
- Q. allow modification of search strategy throughout the search process

Comments: _____

...2.3 SEARCH/INQUIRY/OPAC

2. SEARCH RESULTS

Essential

- A. report number of hits prior to displaying search results
- B. allow different displays and printouts for various types of operators/users
- C. allow operator to set limits of hits that can be displayed with provision for appropriate help screen and override
- D. display search results with status, locations shown
- E. allow searcher to select records to print (rather than printing whole list)
- F. provide for modifications of displays and printouts of search results in sequence and format defined by operator
- G. print bibliographies in shelf list order
- H. provide for modification of format of bibliographies by the operator
- I. allow transfer of print files to diskette,
- J. allow transfer of print files via electronic mail

Desirable

- K. provide for modification of bibliography sequences by operator

...SEARCH/INQUIRY/OPAC

Item 2.3.2: SEARCH RESULTS

Comments: _____

Sub-Section 2.3: SEARCH/INQUIRY/OPAC

**Summary of
Comments**

2.4 CIRCULATION

1. GENERAL

Essential

- A. interface with other modules especially cataloguing and search/inquiry
- B. function independently from other modules
- C. function concurrently with other modules
- D. accept and store both full and partial records (Circulation records should contain at least author, title, call number, status and barcode number if appropriate, plus provide the flexibility to include other fields)
- E. allow circulation status to display on OPAC
- F. allow operator to define record format; loan codes and periods; borrower codes; materials codes
- G. provide access to files via a variety of points, e.g. title, call number, borrower, etc.
- H. provide statistics to monitor circulation activities e.g. for items circulated, for reserves, for overdue and fines, for borrowers, for inventory
- I. allow for inventory control without closing the library

Comments: _____

...2.4 CIRCULATION

2. LOAN PERIODS

Essential

- A. allow variable loan periods and due dates
- B. automatically calculate loan periods and due dates or allow manual entry
- C. allow online modification of due dates
- D. display due date at time of check-out
- E. allow operator to define school library closing days and dates

Comments: _____

...2.4 CIRCULATION

3. CHECK-OUT AND CHECK-IN

Essential

- A. check out materials using manual procedures and/or optical scanning
- B. check in materials using manual procedures and/or optical scanning
- C. verify status of the borrower or the item
- D. "trap" borrower or materials, e.g. when borrower's card has expired, when borrower has materials overdue, when borrower has exceeded his/her limit, when materials have been reserved, when an item presented for loan is recorded as "on loan", etc.
- E. allow operator to ignore/override traps
- F. allow operator to create records online at time of check-out and record loan of miscellaneous items not catalogued (e.g. materials in pamphlet files) or not usually loaned.
- G. allow renewals by automatically verifying status of borrower and item, recirculating, and displaying new due date
- H. allow inter-library loans

Comments: _____

...2.4 CIRCULATION

4. BORROWER FILE

Essential

- A. allow operator to create borrowers' records which contain at least an identification number, full name and "location" plus provide the flexibility to add address, telephone number, parent's work number, borrower classification code, or whatever other details are required
- B. allow operator to modify borrowers' records online
- C. allow operator to delete borrowers' record online unless the borrower has overdue books, unpaid fines, etc.
- D. retrieve and display borrowers' records by identification number, name, "location" etc.
- E. print the borrower file in a variety of sequences

Desirable

- F. allow importing, exporting, and cross-checking of borrowers' records from another electronic source, e.g. student records from school office
- G. allow for global changes of borrowers' records

Comments: _____

...2.4 CIRCULATION

5. OVERDUES

Essential

- A. prepare and print overdue lists in a variety of sequences, e.g. borrower's identification number, borrower's name, room number, grade level, teacher
- B. prepare and print overdue notices
- C. allow operator to compose overdue message and to modify message as required
- D. allow operator to set timing of notices
- E. provide fines control, e.g. calculate and record fines, print fine notices, allow operator to forgive fines, etc.

Desirable

- F. prepare and print mailing labels for overdue notices

Comments: _____

...2.4 CIRCULATION

6. RESERVES

Essential

- A. provide for reserves/holds by both author and title, or bar code
- B. produce a sequential reserve/hold list, i.e. queue holds on an item in the order received
- C. prepare and print reserve/hold notices
- D. automatically cancel reserves/holds when item is checked out
- E. automatically cancel reserves/holds if item is not claimed within a set period
- F. prepare and print recall notices

Comments: _____

...2.4 CIRCULATION

7. ADVANCE BOOKING

Desirable

- A. allow operator to define format for media inventory records, shipping lists, routing lists, packing slips, borrower file and vendor file
- B. display alternative dates if first choice is not available
- C. display alternative media if first choice is not available
- D. display alternative title(s) on same topic if first choice is not available
- E. print confirmation notices for borrowers
- F. allow for inter-library loan
- G. display calendar
- H. record turndowns

Comments: _____

Summary of Comments

[illegible]

3. JUSTIFICATION FOR SELECTION OF AUTOMATION SYSTEM

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4. AUTOMATION SYSTEM IDENTIFICATION

Automation

System/

Product*: _____

Price: 1) Software _____ 2) Support _____

Publisher: _____

Vendor: _____

Hardware

Requirements: _____

Documentation: _____

Language of inquiry: (check as many as apply)

French _____ English _____ Others (specify) _____

* Due to rapidly evolving technology, please check to ensure that this version of the software has not been superseded.



5. APPENDICES

5.1 Typical Record Formats for School Libraries

5.2 Glossary

5.3 Corporate Acronyms



APPENDIX 1

- Typical Record Formats for School Libraries

Typical Card Format for School Libraries

016.3058

Wal

Wall, Naomi, 1939-

Children's books for learning : a bibliography of multi-ethnic resources for classroom use / developed by Naomi Wall for the Cross-Cultural Communication Centre. -- Toronto : The Centre, c1979.

24 p. : ill.

ISBN 0-969-10000-0

1. Children's literature--Bibliography.
2. Ethnic groups--Juvenile fiction--Bibliography. I. Cross-Cultural Communication Centre (Toronto, Ont.) II. Title.

Typical Abridged MARC Record Format for School Libraries

TAG	SUBFIELD code	FIELD TYPE	EXAMPLE
010	a	LC Card Number	
016	a	NLC Bibliographic Record Control Number	
020	a	ISBN	0969100000
040	a	Cataloguing Source	CA 00NL
050	a	LC Call Number	Z1037
082	a	Dewey Decimal Classification Number	011/.62
*083	a	Barcode Number	
100	a	Main Entry - Personal Name	Wall, Naomi
110	a	Main Entry - Corporate Name	
240	a,g	Uniform Title and Misc. Information	
245	a,b,c	Title Proper and Other Titles	Children's books for learning: a bibliography of multi-ethnic resources for classroom use/developed by Naomi Wall for the Cross-Cultural Communication Centre
250	a	Edition Statement	
260	a,b,c	Place of Publication, Publisher, Date	Toronto: Cross-Cultural Communication Centre, c1979.
300	a-g	Physical Description	24p. : ill.
306	a	Duration	
350	a	Price	
440	a	Series Statement - Title (Traced)	
500	a,f,l,z	General Note	
504	a,b,f	Bibliography Note	
505	a,b,f,z	Contents Note	
520	a,f,z	Summary Note	
521	a,f	Audience Note	Professional
570	a,f	Editor Note	
600	a,c,e	Subject Heading - Personal Name	
610	a,c,e	Subject Heading - Corporate Name	
611	a,c,e	Subject Heading - Conference	
630	a,c,e	Subject Heading - Uniform Title	
650	a,c,e,x,y	Subject Heading - Topical	Children's literature--Bibliography Ethnic Groups--Juvenile fiction--Bibliography
651	a,c,e,y	Subject Heading - Geographic Name	
690	a	Subject Heading - Local Subject Name	
700	a	Added Entry - Personal Name	
710	a,b	Added Entry - Corporate Name	Cross-Cultural Communication Centre
730	a	Added Entry - Uniform Title Heading	
740	a	Added Entry - Title Traced Differently	
*900	a	Local Call Number	016.3058 Wal
*901	a	Local Barcode Number	8042
*903	a	Local Price	7.95
*990	a	Item Type	
*999	f,g,h,l,n,w	Location	

* Variations may occur in the fields used for data depending on the bibliographic utility responsible for the record. e.g. If 990 is not present, item type is taken from record header Leader 006.

Sample Record with Descriptors

Sample Record with MARC Tags

Field Type	Example
ISBN	0969100000
Library Decimal Classification Number:	011/.62
Main Entry Personal Name:	Wall, Naomi
Title and Statement of Responsibility Area Title Proper: Other Titles: Statement of Responsibility:	Children's books for learning: a bibliography of multi-ethnic resources for classroom use/ developed by Naomi Wall for the Cross- Cultural Centre
Publication, Distribution, Etc. Area Place of Publication: Publisher: Date:	Toronto: Cross-Cultural Communication Centre, c1979.
Physical Description Area Pagination: Illustrative Matter:	24 p.: ill.
Audience Level:	Professional
Subject Heading - Topical Topical Heading: Subdivision:	Children's literature Bibliography.
Topical Heading: Subdivision: Subdivision:	Ethnic groups Juvenile fiction Bibliography.
Added Entry Corporate Name:	Cross-Cultural Communication Centre.
Local Call Number:	016.3058 Wal
Local Bar Code Number:	8042
Local Price:	7.95

Tag	Code	Example
020	a	0969100000
082	a	011/.62
100	a	Wall, Naomi
245	a b c	Children's books for learning: a bibliography of multi-ethnic resources for classroom use/ developed by Naomi Wall for the Cross-cultural Communication Centre.
260	a b c	Toronto: Cross-Cultural Communication Centre, c1979.
300	a b	24 p.: ill.
321	a	Professional
650	a x	Children's literature Bibliography
650	a x x	Ethnic groups Juvenile fiction Bibliography
710	a	Cross Cultural Communication Centre
900	a	016.3058 Wal
901	a	8042
903	a	7.95

APPENDIX 2

GLOSSARY

American Standard Code For Information Interchange: A standard code for exchange of machine-readable information among differing computer systems. The code consists of a series of eight bits for each of a defined set of characters. Usually abbreviated as ASCII.

ASCII: See American Standard Code for Information Interchange.

Authority: A system for maintaining consistency in the form of names, subjects, series, and uniform titles and cross-references between these terms in a bibliographic file or catalog.

Authority Control: See Authority

Authority File: See Authority

Authority Structure: See Authority

Automated Library System: A library system in which some or all processing is performed by a computer.

Barcode: A machine-readable code consisting of bars of varying widths to represent characters of information, usually numeric.

Batch Processing: A method of processing data in which a number of records are grouped or batched, then processed together at the same time.

Bibliographic Utility: An organization or firm that markets an online file of bibliographic and other records for use by many libraries. e.g. UTLAS in Ontario, TKM in Manitoba, or SDM in Quebec.

Boolean Search: A search for selected information using "and", "or" and "not" conditions is called Boolean. Example: Display all books about children of elementary school age AND nutrition OR diet but NOT vegetarian.

Character: A letter, number or special symbol such as a decimal point or comma.

CD-ROM: Compact Disk-Read Only Memory. The technology for using compact disks to store large amounts of data (1CD=1500 floppy 5 1/4" disks or 300,000 printed pages), primarily for use with personal computers. Data recorded on the disk during manufacture cannot be altered by the computer user. CD-ROM also refers to the actual compact disk. e.g. BiblioFile, ERIC on CD, Grolier's Electronic Encyclopedia.

CD-ROM Drive: A device attached to a computer for reading computer data from compact disks. Refers to a specific application of compact disk drives.

Command Driven: Programs which require that the user learn a set of commands to be used when interacting with the program. A menu which displays all the commands that can be entered would still be a primarily command driven program. See also Menu/Menu Driven.

Control Number: A unique number assigned to a record for the purpose of identification.

Copy Cataloguing: Cataloguing, with or without local editing, including the addition of locations and holdings information to bibliographic records. These can be electronically transferred from source files or the files of other users of a bibliographic utility or manually inputted.

Current Cataloguing: Cataloguing for new acquisitions to the collection rather than materials already in the collection.

Database: A collection of related files of information treated as a unit.

Derived Cataloguing: An edited version of copy cataloguing.

Display: Visible representation of data on a computer screen in the form of a printed report, graph, and/or drawing.

Division/District Library Media Centre: A centrally organized and administered facility that can provide technical support and educational leadership for educational programs, materials and services of the school division/district.

Division/District Library Resource Centre: See Division/District library media centre.

DOS: Disk Operating System. See also Operating System.

Download: Transfer of a program or a data file from a central computer to a remote computer.

Field: A group of related characters treated as a unit of information within a record. e.g. title field, author field.

File: A collection of related records treated as a unit. e.g. patron file, vendor file.

Fixed Length Field: Part of a record which always contains a specific number of available characters for a field from record to record.

Flag: An indicator used for identification.

Flag Indicator: A signal set up to indicate that a specific condition has occurred in a computer.

Function Keys: Separate command keys added to a terminal keyboard, or a set of keys in a keypad which is connected to the terminal. The depression of a function key by the user causes some function in the program to be performed rather than using a control key plus one or two other keys, or typing a lengthy command code. Generally appear on a keyboard as F1, F2, etc.

Global Change (Update): A manipulation of an entire file, data base, volume, program or system.

Help Screen: Instructions that give information about how to use a specific function of the system and that can be displayed on the screen.

Hit: A term used for an answer found by a retrieval system.

Index: A directory of where records, files, and programs are stored on a disk.

Integrated System: A combination of processes which results in the introduction of data which need not be repeated as further related data is also entered. e.g. shipment data may be the basis for cancellation of back orders.

Keyword: Any word or value in a database that can be used in an index. Indexes on CD-ROM include as keywords almost every word on the disk.

Keyword Searching: A way to locate information by retrieving documents that contain a given keyword. Keywords can be combined to make a search more specific and reduce the number of documents retrieved. e.g. a keyword search on title "Apple" or on title "Apple computer".

LAN: See Local Area Network

Learning Resource Centre: See School Library

Library Automation: The use of an automatic device such as a computer to perform some or all operations in a library system.

Local Area Network: A data communications network for the interconnection of computers and terminals within a limited area such as in a building, on a campus, in a school division/district, or in a city. Often abbreviated as LAN.

Log: A file into which statistics about all machine operations taking place are stored for backup and recovery or for statistical purposes.

Log-on: A procedure for users to identify themselves via an identification number or password to the computer system for authorized access to programs and information.

MARC: An acronym for **M**ACHINE **R**eadable **C**ataloging. An international, standardized format for recording bibliographic information in a machine-readable form for communication or exchange among libraries and institutions. e.g. Can MARC, UK MARC, UTLAS MARC, US MARC.

Menu/Menu Driven: A list of available options in an interactive program or a display of all options available to the user at the terminal. Menu driven programs use menus as the primary interactive method and are easy to use for beginners. See also Command Driven.

Modem: A contraction of **MOD**ulator-**DEM**odulator. An interface between a computer and a telephone line to convert the digital signals of the computer to the signals of the telephone line and vice versa.

Module: Hardware or software component. Software modules are self-contained segments of a program. Hardware modules are self-contained systems that are part of a larger system.

Monographs: Materials that are published and purchased once, as opposed to serial publications that are paid for in advance and published and received at intervals.

Must-fill Field: A field which must have data entered in it before a record can be stored.

Network/Networking: Two or more separate locations organized to share or exchange information and other resources through manual or electronic facilities e.g. electronic bulletin boards or machine-readable files.

Online: Equipment or a process under the direct control of the central processing unit of a computer.

Online Public Access Catalogue: A catalogue containing bibliographic records for the holdings of one or more libraries, stored on magnetic disk or other recording media, and made available electronically to the public. The catalogue may be searched by author, title, subject, call number, and possibly other indexes. Sometimes referred to as OPAC.

OPAC: See Online Public Access Catalogue.

Operating System: A special computer program, or set of programs, that manages and controls the execution of other programs. Usually abbreviated as OS. See also DOS.

Optical Scanner: A device that can sense or read machine-readable data via reflected light and then converts the data to a form that can be processed by a computer.

Original Cataloguing: Creating catalogue records from the item in hand, usually with the help of reference sources. See also Copy Cataloguing, Derived Cataloguing.

OS: See Operating System.

Queue: Any storage space, either in memory or on disk, reserved to hold information temporarily.

RECON: RETrospective CONversion of bibliographic records to machine-readable form (i.e. conversion of records for materials already in the collection as distinct from materials currently being added to the collection). See Current Cataloguing.

Record: A collection of related items or data elements treated as a unit of information.

Report: A collection of facts and figures or a specifically designed layout of data and information printed on paper, displayed on screen, or presented in another format. A report may contain any information derived from the data base.

Report Generator: See Report Writer.

Report Writer: A generalized program to create and print or display reports. A report writer allows users to create reports by describing the report rather than programming the report. Report writers can be menu driven, allowing first-time users to prepare customized reports with minimal training. Report writers may be stand-alone software packages which can access existing data bases, or they may be part of a data base management system.

School Library: The area in a school, administered by a teacher-librarian, which creates an environment that encourages the use of various media, facilitates the implementation of the school curriculum, helps motivate students to use the materials and services necessary for learning, and provides the flexibility needed to implement new technologies and programs.

Searching: Locating specific information by systematically examining the indexes for all data available.

Serials: Periodicals, magazines, newspapers. and other materials that are published serially, such as annual reviews.

Service Bureau: A computer services organization which offers time-sharing (hardware) and software services for users. Connection is made from terminals in the user's premises by dialing-up a computer in the Service Bureau. Users log-on to the time-sharing system and then can access programs and information. e.g. Dialog or MINET.

Source Files: Files of bibliographic or authority records that originate from national libraries such as the National Library of Canada and the U.S. Library of Congress and that are available from various providers such as UTLAS, OCLC, TKM and from CD-ROM vendors such as BiblioFile Laserquest, and SDM.

Stopword: Words deliberately excluded from an index because they are not useful in locating information. Articles, prepositions, and connectors are usually made stopwords, along with other very high frequency words. e.g. a, an, the, le, les.

Subfield: Groups of related characters of information describing particular aspects of a field.

Tag: One or more characters that identify the name of a field of a record. e.g. the MARC tag for the title field is 245.

Truncation: A symbol used in keywords and computer commands to indicate positions where any value is acceptable. The asterisk (*), "at" sign (@), and question mark (?) are the symbols most often used as wildcards. In searches, wildcards can be used for variations of a keyword. For example, a search using PROGRAM@ would retrieve documents with PROGRAM and all words beginning with PROGRAM, like PROGRAMS, PROGRAMMER, PROGRAMMING, PROGRAMMED, PROGRAMMABLE, PROGRAMMATIC, etc.

Turndown: Unavailability of material at time required or requested.

Turnkey Library System: A system that has been designed and tested by a manufacturer or other vendor and, when installed in the library, is ready to be operated merely by "turning the key".

Union Catalogue: A library catalogue that integrates the holdings of more than one library.

User Files: Files of bibliographic or authority records which indicate the holdings of specific libraries or library consortia and which may be shared among them for a variety of purposes.

User Interface: The manner in which an on-line system interacts with the user (menus, commands, use of keyboard, scrolling, screen design).

Variable-Length Field: A field whose length varies from record to record depending upon the information to be entered.

Wildcard: See Truncation.

WORM: Write Once, Read Many. Technology for optical discs that can be recorded directly by a Personal Computer user. Data can be written to the disk at any time but cannot be changed or erased.

APPENDIX 3

CORPORATE ACRONYMS

- ERIC - Educational Resources Information Center
- MINET - Manitoba Information Network
- OCLC - Online Computer Library Center Inc.
- UTLAS - UTLAS International Canada (formerly University of Toronto Library Automation System)
- SDM - Services Documentaires Multimedia